

North Stawell Minerals

06 October, 2022

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High-Grade Gold Revealed at Lubeck Tip Prospect

Composite sampling re-splits have revealed high-grade gold anomalism, emphasizing the prospectivity of the Lubeck Tip target.

Highlights:

- High-grade gold encountered during composite sample re-splitting at Lubeck Tip, converting broad, low-grade gold 'smear' into narrow, discrete, high-grade intervals:
 - o 1m @ 5.05 g/t Au from 56m (NSAC0172), and;
 - 1m @ 3 g/t Au from 42m (NSAC0173).

- Drilling has confirmed a geophysics target that is now demonstrated to include prospective geology, alteration, structural setting, and high-grade gold linking Lubeck Tip closely to the 'Stawell-Type' mineralisation model
- This greenfields success warrant thorough phase 2 drilling programs to determine the source of this anomaly.
- Drill spacing to date (200m+) leaves the target open in all directions and at depth, representing a significant opportunity for a substantial gold system, defined by the coincident magnetic and gravity anomaly, and overlying high-grade gold.

Victorian gold explorer North Stawell Minerals Ltd (ASX:NSM) ('North Stawell' or 'the Company') is pleased to provide an update on its exploration programs. Early results from an RC drilling program over the southern portion of the Company's tenements completed in June 2022 have added to the successes of the FY22 regional Phase 1 air core drill program.



North Stawell Minerals Chief Executive Russell Krause said:

"Follow-up testing of composite results at Lubeck Tip represents primary greenfield success for NSM's regional air core program. The drilling has confirmed a geophysics target that is now demonstrated to include prospective geology, alteration, structural setting, and high-grade gold linking Lubeck Tip closely to the 'Stawell-Type' mineralisation model.

Composite sample splitting has transformed a broad, low-grade gold 'smear' into a narrow, high grade, primary gold zone. These results warrant thorough phase 2 drilling programs to determine the source of this anomaly. Lubeck Tip has had very little drilling with 200m+ drill spacing and remains open in all directions and at depth.

We are proud to announce that the 1m @ 5.05 g/t Au result in NSAC0172 is the third highest grade air core result drilling through Murray Basin Cover in our tenement package (1925 holes for 108,000m). This result came from the 12th hole drilled into the formerly untested target.

The success of the phase 1 air core program at Lubeck Tip has proven that NSM's exploration strategy can be employed effectively and applied to other purely geophysical targets within our tenement suite.

Major phase 2 work programs have been designed to follow up these encouraging results. NSM is in a fortunate position of having a healthy cash balance to fund significant follow up work, starting shortly."



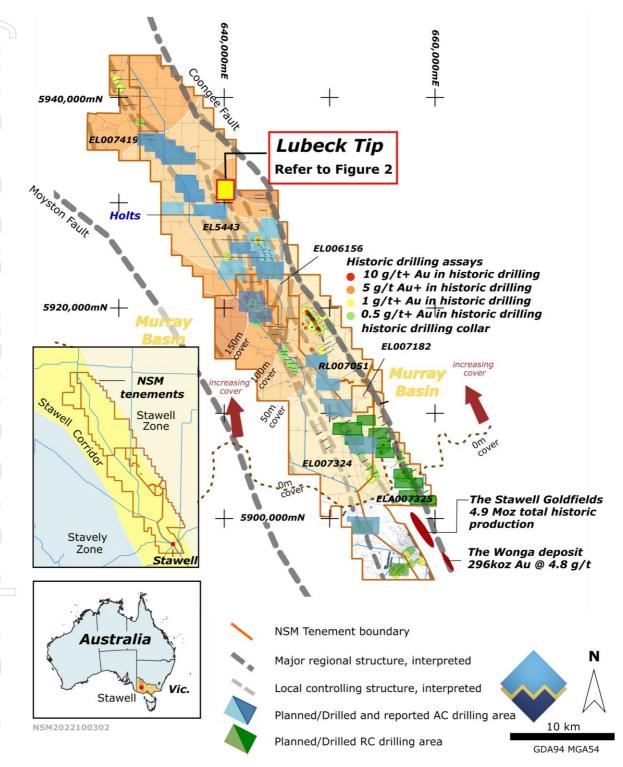


Figure 1: NSM tenure map highlighting areas with completed air core drilling and RC drilling. The image also shows the position of the Stawell Gold Mine, major interpreted structures, the edge of the Murray Basin cover, approximate depth to basement historic drilling collars with gold anomalism based on individual assays grades downhole and the location of the Lubeck Tip prospect.

Exploration Strategy

North Stawell Minerals is exploring for repeats of the multi-million-ounce Stawell Gold Mine under a thin blanket of un-mineralised sedimentary cover (the Murray Basin Cover). A distinct advantage of exploring for this type of mineralisation is that a basalt core controls mineralisation sites and the basalt can be remotely mapped with geophysics (i.e. beneath the blanket of cover). A high-resolution airborne gravity survey conducted in the June Quarter FY21 completed the data suite required to efficiently explore. An air core drilling rig tested regional targets for 8 months from October 2021.

Within the basalt structures additional targeting is possible. Observations of controls on mineralisation in the Stawell Gold Mine and modelling of ore-controls indicate that mineralisation is most likely to occur on the contacts (or proximal to the contacts) of the basalt cores where changing geometries create dilation zones (fold hinges, embayments, etc.) thereby creating spaces where gold mineralisation can be deposited. Drilling is prioritised where these locations are interpreted in geophysics analysis.

Multiple suites of early to middle Devonian granites intrude into the regional Cambro-Ordovician sediments. This creates the opportunity to explore for Intrusion Related gold (IRG) and thermal aureole gold (TAG) deposits (e.g. the Wonga Deposit and mine in Stawell). Identifying major structures that intersect or lie adjacent to granites is important as they have proven highly prospective for IRG or TAG mineralisation.

Lubeck Tip in Detail:

Follow-up splitting of composite samples were completed on seven of the 13 anomalous holes drilled during the first phase of drilling at Lubeck Tip¹. Of the seven holes re-split, five returned anomalous grades (table 2, figure 2). Anomalous gold at Lubeck Tip appeared as broad, low-grade gold 'smears' prior to composite re-splitting¹. Three of the holes re-split resulted in similar intercepts, with wide, low-grade anomalies. Two holes were converted from broad, low-grade gold intersects into, narrow, discrete, high-grade gold intercepts.

High-grade gold mineralisation is spatially associated with the coincident magnetic and gravity anomaly that defines the Lubeck Tip target. Current drill spacing (200m+) has insufficiently tested the width and strike of the Lubeck Tip geophysical anomaly with the 1m @ 5.05 g/t Au intercept in NSAC0172 remaining open for 750m to the north, and completely open to the south and to the east. Further infill drilling is planned to test the significant intersections in NSAC0172 and NSAC0173 (figure 1, 2).

Geophysical inversion modelling (Figure 4, ASX announcement 29 Oct 2021) interprets the source of the Lubeck Tip coincident magnetic and gravity anomaly (a basalt dome) to be near surface. Drilling has only intersected Cambrian metasediments downhole. This suggests that the 'roof' of the ore system is intact, explaining the broad, low-grade gold 'smears' seen at Lubeck Tip. The 1m @ 5.05 g/t Au and 1m @ 3 g/t Au intersections in NSAC0172 and NSAC0173 respectively (figure 3) are potentially indicative of the 'Central Lode' structure (Figure 13, NSM Prospectus) seen at the 5 Moz Stawell goldfields.

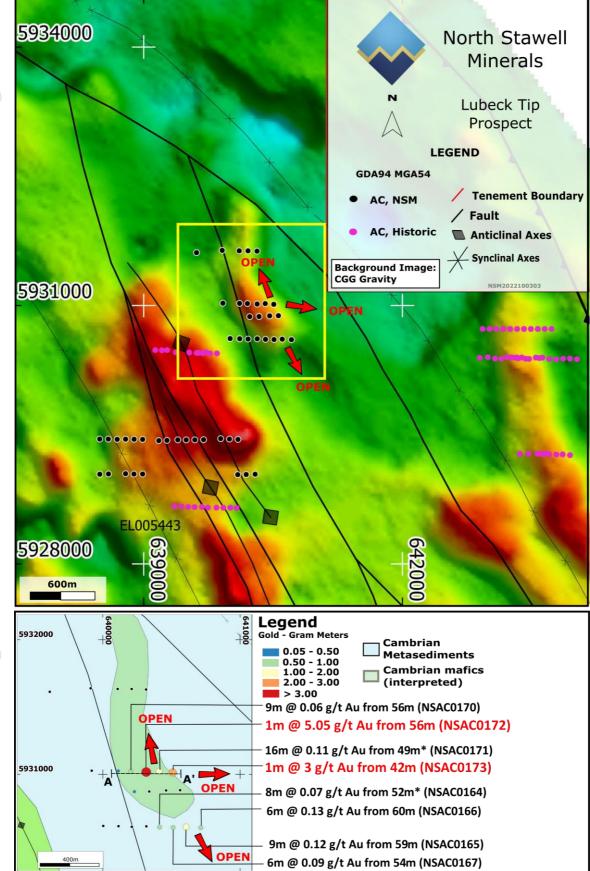


Figure 2: Top: Plan view of gravity data around Lubeck Tip with historic and NSM drill hole collars. Bottom: Lubeck Tip geology and significant intercepts

¹Refer to announcement 27th April 2022



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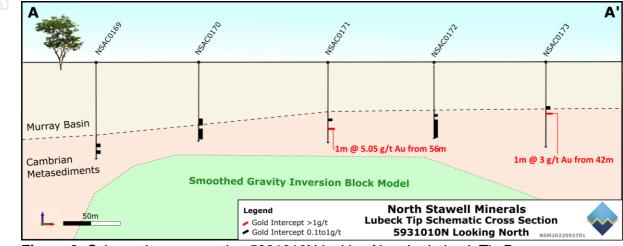


Figure 3: Schematic cross section 5931010N looking N at the Lubeck Tip Prospect.

Table 1: Significant intersections (>1 g/t Au) in Lubeck Tip composite re-splitting

Hole ID	Prospect	Easting MGA54	Northing MGA54	RL asl	Azi. Deg	Dip deg	Final Depth (m)	Results Anomalous (g/t Au)	GxM
NSAC0172	LUBECK TIP	640316	5931016	149.82	0	-90	69	1m @ 5.05 g/t Au from 56m	5.05
NSAC0173	LUBECK TIP	640509	5931013	149.04	0	-90	72	1m @ 3 g/t Au from 42m	3

* Drillhole ends in anomalous grades

Table 2: Anomalous results from the Lubeck Tip composite re-splitting

		Easting	Northing	RL	Azi.	Dip	Final Depth		
Hole ID	Prospect	MGA54	MGA54	asl	Deg	deg	(m)	Results Anomalous (g/t Au)	GxM
NSAC0164	LUBECK TIP	640413	5930606	150	0	-90	60	7m @ 0.073 g/t Au from 52m*	0.511
NSAC0165	LUBECK TIP	640607	5930608	149	0	-90	75	6m @ 0.18 g/t Au from 52m	1.08
								9m @ 0.12 g/t Au from 59m	1.08
NSAC0171	LUBECK TIP	640410	5931021	150	0	-90	65	3m @ 0.13 g/t Au from 44m	0.39
NSAC0172	LUBECK TIP	640316	5931016	150	0	-90	69	2m @ 0.21 g/t Au from 47m	0.42
								1m @ 5.05 g/t Au from 56m	5.05
NSAC0173	LUBECK TIP	640509	5931013	149	0	-90	72	3m @ 0.07 g/t Au from 36m	0.21
								1m @ 3 g/t Au from 42m	3

* Drillhole ends in anomalous grades

Anomalous results include grades >0.05g/t Au. Grades are combined into composites where adjacent assay results have an average grade greater than 0.05g/t Au. No external dilution is applied. Up to 2m of internal dilution is included in intercepts. Stated thicknesses are downhole and unlikely to be representative of true mineralisation widths.



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This Announcement is authorised for release by Russell Krause, Chief Executive Officer of North Stawell Minerals Ltd

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About North Stawell Minerals Limited:

North Stawell Minerals Limited (ASX: NSM) is an Australian-based gold exploration company, solely focused on discovering large scale gold deposits in the highly prospective Stawell Mineralised Corridor in Victoria.

The Company is exploring prospective tenements located along-strike of and to the immediate north of the Stawell Gold Mine which has produced in excess of five million ounces of gold. NSM's granted tenure has a total land area of 450 km². NSM believes there is potential for the discovery of large gold mineralised systems under cover, using Stawell Gold Mine's Magdala orebody as an exploration model to test 51km of northerly strike extension of the underexplored Stawell Mineralised Corridor.

Stawell-type mineralisation - the Magdala Mine at Stawell

The multi-million ounce Magdala Mine (or Stawell Mine) is owned and operated by Stawell Gold Mines (SGM) and makes an excellent model for exploration. The style of mineralisation is termed Orogenic Gold, and has many similarities to other Victorian gold deposits (e.g. Bendigo, Ballarat, Fosterville) where the mineralisation exploits structures that are developing as the host rocks are compressed, folded and faulted. The mine is 3.5km long, approx. 400m wide and mined to depths of around1,600m. The mineralisation is centred on a large buttress of doubly-plunging basaltic rock (the Magdala "Dome"). Ore shoots are on – or proximal to – the margins of the basalt, occurring where the structures that control the mineralisation bend and warp around the basalt. The mine is still operational.

Exploring for Stawell-type mineralisation through cover.

Stawell Mine was found in the 1850's because it occurred close to the surface and was not obscured by a blanket of sedimentary cover. Over 80% of NSMs tenements are masked by sediments, but the underlying rocks and structures are similar to Stawell. Multiple repeats of basaltic "domes" are interpreted throughout the NSM tenements and elsewhere along the Stawell Corridor. Some of these have for Stawell-type mineralisation is that the basalt domes - intrinsically associated with mineralisation – can be detected with geophysics, and identified through the cover. New geophysical processing and acquisition by the company is levering off the geophysics response to find "domes" as a pathway to mineralisation.

Other Mineralisation potential



Multiple shears, thrusts, faults and folds occur through the NSM tenements. These also have potential to host orogenic gold systems without basalt domes. However, they are more challenging targets through the covering sediments as they lack the geophysical signature of the domes found in Stawell-type mineralisation. Intrusion related gold (IRG) and thermal aureole gold (TAG) type deposits are possible as late granites intrude the folded rocks with potential to remobilise and upgrade existing mineralisation or be mineralised themselves.

Competent persons Statement

The information that relates to Exploration Targets, Exploration Results and Mineral Resources is based on information compiled by Mr Bill Reid, a Competent Person who is a Member of The Australian Institute of Geoscientists (AIG) and Head of Exploration of North Stawell Minerals. Mr Reid has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (2012 JORC Code). Mr Reid consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Forward-Looking Statements

This announcement contains "forward-looking statements" within the meaning of securities laws of applicable jurisdictions. Forward-looking statements can generally be identified by the use of forward-looking words such as "may", "will", "expect", "intend", "plan", "estimate", "anticipate", "believe", "continue", "objectives", "outlook", "guidance" or other similar words, and include statements regarding certain plans, strategies and objectives of management and expected financial performance. These forward-looking statements involve known and unknown risks, uncertainties and other factors, many of which are outside the control of NSM and any of its officers, employees, agents or associates. Actual results, performance or achievements may vary materially from any projections and forward-looking statements and the assumptions on which those statements are based. Exploration potential is conceptual in nature, there has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resource. Readers are cautioned not to place undue reliance on forward-looking statements and NSM assumes no obligation to update such information.



Appendix 1: NSM Tenure Summary

Tenement	Status	Number	Area (km2)	Graticules ¹	Initial NSM holding	Earn-in potential
Wildwood	Granted	RL007051	50	50	51%	90%
Barrabool	Granted	EL5443	182	194	51%	90%
Glenorchy West	Granted	EL006156	10	18	100%	n/a
Barrabool Wimmera Park	Granted	EL007419	37	40	100%	n/a
Granite	Granted	EL007182	4.5	9	100%	n/a
Deep Lead	Granted	EL007324	167	209	51%	90%
Germania	Granted	EL007325	54	82	51%	90%

Total granted

504.5

602

¹ Exploration Licence areas in Victoria are recorded as graticular sections (or graticules). Graticules are a regular 1km by 1km grid throughout the state. The graticular sections recorded for an exploration licence is the count of each full graticule and each part graticule. If the tenement shape is irregular, the actual area (km²) is less than the graticular area.

							Final	
		Easting	Northing	RL	Azi.	Dip	Depth	
Hole ID	Prospect	MGA54	MGA54	asl	Deg	deg	(m)	Assays
NSAC0163	LUBECK TIP							NSA
NSAC0164	LUBECK TIP	640413	5930606	150	0	-90	60	7m @ 0.073 g/t Au from 52m*
NSAC0165	LUBECK TIP	640607	5930608	149	0	-90	75	6m @ 0.18 g/t Au from 52m
								9m @ 0.12 g/t Au from 59m
NSAC0169	LUBECK TIP	640112	5931024	149	0	-90	83	NSA
NSAC0171	LUBECK TIP	640410	5931021	150	0	-90	65	3m @ 0.13 g/t Au from 44m
NSAC0172	LUBECK TIP	640316	5931016	150	0	-90	69	2m @ 0.21 g/t Au from 47m
								1m @ 5.05 g/t Au from 56m
NSAC0173	LUBECK TIP	640509	5931013	149	0	-90	72	3m @ 0.07 g/t Au from 36m
								1m @ 3 g/t Au from 42m

Appendix 2: Lubeck Tip composite re-split Program Collars

* Drillhole ends in anomalous grades

NSA – No significant assay (>1g/t Au). Anomalous results (0.05 -1.0 g/t Au) are discussed in text.



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JORC Table 1

Section 1 Sampling Techniques and Data - Air core Drilling

Section 2 Reporting of Exploration Results

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the	Sampling is conducted by collecting rock cuttings from air core drilling
	 minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure 	Dry samples will be split with a 1/8 th riffle splitter. Wet sample comprise grabs. Each meter sampled is kept and stored for resplits and or follow up analysis.
	 sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. 	Composite resplit sampling was conducted on anomalous intervals. Grab samples were collected from intervals stored in RC bags. 2-3kg of sample was collected from each meter.
• In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems.	For wet samples, 2-3kg of sample is grabbed every 3m composite. The sample is dried, crushed and pulverised at a certified lab (Gekko Ballarat) and assayed for with a 50g charge.	
	For each meter of bedrock sample, a geochemistry bag full of sample is taken to be dried for later pXRF analysis	
		QAQC samples were inserted into the sample stream approximately every 10th sample, including matrix matched standards (Oreas) and blanks consisting of barren quarry basalt. Repeats are inserted (at least 1/hole and collected by cone and quartering the sample in the field.
		Sample intervals were 3m composites with minor variation at end-of-hole (<=3m). 1m resplits are taken for any composite result that returned >0.17 g/t Au.
Drilling techniques	• Drill type (e.g. core, reverse circulation, open- hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple	Drilling is performed by a Mantis 80 Landcruiser mounted rig with 3m NQ rods.
	or standard tube, depth of diamond tails, face- sampling bit or other type, whether core is oriented and if so, by what method, etc).	Holes were drilled vertically and at -60.
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and 	It is reported that when intercepting significant groundwater, the sample recovery decreased by up to 20%.
	 ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may 	Drillers are advised if sample return is deteriorating and requires improvement.
	,	Downhole sample contamination was reported on



	have occurred due to preferential loss/gain of fine/coarse material.	25% of holes and, rarely, 10% of the total sample was contamination. Most of the material is barren Murray basin cover. Almost all samples are wet beneath the water table and some of the fine fractions are likely to be lost to overflow from the cyclone.
		End of hole refusal 'core' was recovered on >85% of all holes drilled.
Logging	• Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical	Each hole was logged quantitively into a customized Excel spreadsheet with inbuild validation scripts.
	 studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) 	All end of hole core was collected and XRF data was collected.
	 photography. The total length and percentage of the relevant intersections logged. 	The regional, vanguard AC drilling is unlikely to be used to support mineral resource determination.
Sub-sampling techniques and sample	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary 	the logging and assigned by the rig geologist.
preparation	split, etc and whether sampled wet or dry.For all sample types, the nature, quality and appropriateness of the sample preparation	The standard sample interval was 3m composites.
	technique. • Quality control procedures adopted for all sub-	All bedrock (target) samples are wet Samples are kept and 'farmed' for follow up if required.
	 sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling. 	Field duplicates were inserted into the sample stream every ~20th sample. Duplicates were preferentially undertaken on meters that appear to be more likely to contain anomalous Au.
	• Whether sample sizes are appropriate to the grain size of the material being sampled.	Certified reference material (CRM) is inserted into the sample stream on every ~20th sample. CRM was inserted in between on meters that appear to be more likely to contain anomalous Au.
		A blank was inserted into the sample stream after an interpreted anomalous zone or every ~30 samples.
		Every sample was weighed in the field and varied between 1.5 and 3kg.
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld 	Samples processed at Gekko Assay Laboratory are dried, crushed and pulverised (<75um), analysed with Fire Assay for gold with an ICP acid digest for 10 elements (Ag, As, Bi, Cd, Cu, Mo, Pb, Sb, W, Zn).
	XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	Internal laboratory QAQC checks are reported by the laboratory and a review of the QAQC reports suggests that the laboratory is performing within
	• Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	acceptable limits.



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		Field duplicates, blanks and standards pass within acceptable variation.
		Composite sample resplits returned highly variable results from initial gold values. This may suggest that there was downhole contamination in the first phase of drilling. It also suggests that the nature of the gold mineralisation may be nuggety.
Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	The data has been verified by North Stawell Minerals Competent Person. Data entry is via standardized Company excel templates, using pre-set logging codes, with built in validation checks. Data is stored in a third-party geodatabase (datashed) and managed by an external DBA (EarthSQL); further internal validations before
		export products are generated. Data is further validated visually in GIS and 3D software by North Stawell Minerals Personnel.
Location of data points	 Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. 	The collar coordinates were collected with a handheld GPS with an accuracy of 1.8m. The coordinates are input into the logging spreadsheet and are viewed in GIS software for validation.
	 Specification of the grad system used. Quality and adequacy of topographic control. 	The coordinates were collected in GDA94 / MGA zone 54
		All collars are levelled to the DEM which was collected by AGG geophysics to a 1m accuracy.
Data spacing and distribution	 Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. 	and ~300m between fences.
	• Whether sample compositing has been applied.	
Orientation of data in relation to geological structure	• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	Drilling was designed as first pass regional exploration to collect basement geochemistry data thorough alluvial cover and hence vertical drilling is appropriate.
	• If the relationship between the drilling orientation	Angled holes are planned with azimuths perpendicular to the regional trend.
	and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	⁸ No material sample bias is expected or observed.
Sample security	• The measures taken to ensure sample security.	Samples were returned to site each day and stored inside a secure, fenced area.
		Samples were loaded into labelled polyweave bags, zip tied and secured with plastic wrap on pallets prior to transportation.



	Chain of custody is managed by internal staff and transport contractors. Drill samples are stored on site and transported by a licensed reputable transport company to ALS Laboratories or Gekko Assay Laboratories. Sample receipts are issued. At the laboratory samples are stored in a secured yard before being processed and tracked through preparation and analysis.
	Sample information other than the company name and the sample ID are not provided to the laboratories.
Audits or reviews • The results of any audits or reviews of sampling	There has been no external audit of the Company's sampling techniques or data.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary	
Mineral tenement and land tenure status	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of 	The Wimmera Park Project is located with NSM's 51% owned EL007324 and NSM's 51% owned EL007325. The tenements are current and in good standing. The project area occurs on freehold land. EL007324 is the subject of royalty agreements	
	reporting along with any known impediments to obtaining a licence to operate in the area.	(see Appendix 1: NSM tenement summary.	
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	No exploration activity has been undertaken at the Wimmera Park prospect by previous explorers. Analogies were identified with minor associated gold mineralisation.	
<i>Geology</i> • Deposit type, geological setting and style of mineralisation.		The project areas are considered prospective for the discovery of gold deposits of similar charac to those in the nearby Stawell Gold Mine, particularly the 5Moz Magdala gold deposit located over the Magdala basalt dome. The Stawell Goldfield has produced approximately 5Moz Au from hardrock and alluvial sources. More than 2.3Moz Au has been produced since 1980 across more than 3 decades of continuous operation. Orogenic Gold occurrences are possi away from the basalt domes in typical orogenic gold systems common in Central and western Victoria.	
Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar 	Details of all air core drilling is summarised in Appendix 2 of this report Sections and plans with summaries of assay are included in the body of the document for all drilling completed.	
	 elevation or RL (Reduced Level– elevation above sea level in metres) of the drill hole collar o dip and azimuth of the hole o down hole length and interception depth 	Summary tables of drillhole data are included. Pathfinder elements determined by ICP for Gekko samples are not reported – these are vectors to	



	 hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	mineralisation. Where discussed in the text, laboratory analyses for these elements are described in qualitative terms.
Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	Only results with anomalous gold values (>0.05ppm) have been reported. No metal equivalents have been reported No metal equivalent reporting is used or applied. For significant results (<1g/t Au) No external dilution is used. Internal dilution up to 2m so long as the average grade remains significant. For anomalous results (1 g/t Au>assay>0.05 g/t Au) no internal or external dilution is used. "including" results will be stated where the included result is an order of magnitude greater that the larger intercept.
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known'). 	All drillholes in this program were vertical. Intercept lengths are down-hole length. Orientations of mineralisation are not known but are expected to be sub-vertical to moderately dipping.
Diagrams	 Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	Diagrams are included in this report, including locations, plans and sections and areas mentioned in the text.
Balanced reporting	• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	GPS, which is considered an appropriate degree of
Other substantive exploration data	• Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	Geophysical data is described in the text. Details of the processing methodology are available in Table 1 of the September 2021 Quarterly report and in Table 1, part B: Geophysical inversions.
Further work		Further campaigns of drilling will be based on the completion of the current air core programme, followed by evaluation of the data. For better



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• Diagrams clearly highlighting the areas of possible extensions, including the main geological trends. interpretations and future drilling areas, provided this information is not commercially sensitive. other drill rigs (RC or DD as appropriate) will execute any deeper follow up work.

Section 1 Sampling Techniques and Data - c. Historic Drilling

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	 Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. 	 Historic results (only depicted on Figures) are from previous exploration conducted by past explorers including Rio Tinto Exploration, WMC Resources, Leviathan Corporation, Highlake Resources, Planet Resources and Stawell Gold Mines.
Drilling techniques	• Drill type (e.g. core, reverse circulation, openhole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	 A variety of techniques have been used in historic drilling and includes regional lines of RAB or Air core drilling (357 of 732 historic holes) over identified structures or geophysical anomalies. Follow up historic RC drilling (233 holes) under AC anomalies occur is sound practice. Pattern drilled RC at Wildwood is likewise an industry standard for resource drilling. Forty-eight historic diamond holes (8,228m) were completed – mainly focused on near Mine targets in the south and in the Wildwood Project area (RL007501). Standard Industry techniques have been used for historic drilling where documented.
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may 	• For historic data, if available, drilling data recoveries (e.g. weights for historic AC/RC drilling and recoveries for historic diamond drilling are recorded.



	have occurred due to preferential loss/gain of fine/coarse material.	• No tests for bias are identified as yet for historic results.
Logging	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	 Geological logging of historic holes, where reviewed, follows industry common practice. Qualitative logging includes; lithology, mineralogy, alteration, veining and weathering and (for core) structures. All historic logging is quantitative, based or visual field estimates.
Sub-sampling techniques and sample preparation	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all subsampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	 Standard industry practices are expected to be in place. However, QAQC data is incomplete in the historic data. It is considered that appropriate analytical methods have been used by historic explorers. Historic core sampling is typically sawn half-core. Historic RC and AC samples are typically riffle split or spear-sampled. Information is not always complete. Historic sampling is typically dry.
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established. 	 Historic assays include gold +/- arsenic and base metals. Assays are generally aqua regia or fire assay. Detection limits and techniques are appropriate for historic results.
Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	 Historic intercepts have not been verified by the Company. The data from WMC, Leviathan and Stawell Gold Mines has been verified as part of entering data into geological databases. No adjustments to assay data have been made.
Location of data points	 Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. 	• Locations for historic collars have been captured in WGS84, AGD 66 and GDA94 projected coordinates or in local grids. All data is reprojected as GDA94 MGA54.



	• Quality and adequacy of topographic control.	 Historic drill collars have been determined with a number of techniques, ranging from survey pick-up through differential GPS. Topographic data is based on generational topographic maps and/or survey pick-up. Topographic control, for regional exploration, has not been validated. Future use of data will verify recorded elevations against high-resolution topographic data acquired by NSM.
Data spacing and distribution	 Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	 Historically, variable drill hole spacings are used to test targets and are determined from geochemical, geophysical and geological data. Historic regional and geochemical drilling (AC) is drilled on strike perpendicular fences, with approx 100m hole spacings and 100-400m line spacing Historic RC sampling is generally specifically targeted to follow up AC results Minor RC fences are drilled, on 30-200m spacing. Historic diamond drilling is located to follow up on specific prior results or targets Historic data in the footprint of the tenement EL007324 were designed and executed as regional exploration. The historic drilling data has not been reviewed for its appropriateness to inform Mineral Resource Classification.
Orientation of data in relation to geological structure	• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	• The historic drill orientation is perpendicula to the regional geology and known mineralised trends previously identified from earlier drilling.
	• If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	
Sample security	• The measures taken to ensure sample security.	• Sample security has not been reviewed for the historical data.
Audits or reviews	• The results of any audits or reviews of sampling	• There has not been internal or external audi or review of historic assays identified.



Criteria	JORC Code explanation	Commentary
Mineral tenemen and land tenure status	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	 Current tenements are summarised in Appendix 1 -Table 1 of the announcement. Historic tenements are identified from the Victorian Government Geovic online spatial resource All granted tenements are current and in good standing. The project area occurs on freehold land. Minor Crown Land (>3%) and Restricted Crown Land (>1%) is identified. All areas are accessible if appropriate land access requests and agreements are in place. The Victorian Governments Geovic spatial online resource does not identify any material cultural, environmental or historic occurrences. The southern end of EL007324 encompasses parts of the Stawell Township. These areas are complicated by dense, urban freehold land parcels, and challenges gaining access may occur if attempted. EL007324 is held by Stawell Gold Mines (SGM). North Stawell Minerals has an earn- in agreement with SGM. Initial Interest is 51%. Up to 90% earn-in can be achieved on meeting agreement conditions. EL007325 "Germania" was granted in November 2021. Tenement security is high, established in accordance with the Victorian Mineral Resources Act (MRSDA) and Regulations (MR(SD)(MI)R 2019). Victorian Exploration licences are granted for a 5-year initial term with an option to renew for another 5 years. Compulsory relinquishments are as follows; end of year 7 - 20%: end of year 9 - 10%
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	 The Tenure area has been explored in several campaigns since the 1970's, principally by companies related to Stawell Gold Mines and its predecessors (initially WMC Resources in the 1970's, Leviathan Resources and then subsequent owners). Rio Tinto Exploration, Planet Exploration, Highlake Resources and Iluka Resources have also held parts of the tenement historically. Public data available on exploration programmes has been downloaded from the Victorian State Governments' GeoVic website and sometimes describes exploration strategy, which is consistent with exploring for gold mineralisation under



	 Although NSM has reviewed and assessed the exploration data, it has only limited knowledge of the targeting and planning process and, as a consequence, has had to make assumptions based on the available historical data generated by these companies. However, the methodology appears robust. Work by Iluka was for Heavy Minerals exploration and is not material to gold exploration. Most programs include regional lines of RAB or AC drilling (577 of 650 holes) over identifiable magnetic highs. Follow up RC drilling (58 holes) under AC anomalies occur is sound practice. Eleven diamond holes (2419m) are completed – mainly focused on near Mine targets in the south. Work has identified large, low grade gold anomalism along major interpreted structures (magnetics) and represents a technical success. In the far south of tenement EL007324 and EL007325, exploration is typically testing for fault-repeats of the Stawell-type mineralisation, centred on magnetic anomalies. Basalt 'dome' analogies were identified with minor associated gold mineralisation.
<i>Geology</i> • Deposit type, geological setting, and style of mineralisation.	 The project areas are considered prospective for the discovery of gold deposits of similar character to those in the nearby Stawell Gold Mine, particularly the 5Moz Magdala gold deposit located over the Magdala basalt dome. The Stawell Goldfield has produced approximately 5 million ounces of gold from hard rock and alluvial sources. More than 2.3 million ounces of gold have been produced since 1980 across more than 3 decades of continuous operation. Orogenic Gold occurrences are possible
	 away from the basalt domes. Wonga-style mineralisation is possible, interpreted as Intrusive-Related Gold, and may be either an upgrade on prior (orogenic mineralisation) or a fresh mineralisation event.
	 The geological setting is a tectonised accretionary prism on the forearc of the Delamerian-aged Stavely Arc active plate margin. Elements of the subducting tholeiitic
	 basaltic ocean crust are incorporated into the accretionary pile and are important preparatory structures in the architecture of Stawell-type gold deposits. Mineralisation is a Benambran-aged
	hydrothermal (orogenic gold) overprinting



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		event – penecontemporaneous with other major mineralisation events in western and central Victoria (e.g. Ballarat, Bendigo, Fosterville).
Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level-elevation above sea level in metres) of the drill hole collar o dip and azimuth of the hole o down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	 The report includes no new drilling results. Historic results are summarised as assays extracted from a historic, managed, validated database solution (Acquire), and associated procedures for QAQC. Historic easting and northings are captured as WGS84, AGD66 and GDA94 coordinates. All are transformed to GDA94MGA54S for the collar tables. Drill collar elevation is defined as height above sea level in metres (RL). Drill holes were drilled at an angle deemed appropriate to the local structure and stratigraphy and is tabulated. Regional AC and RAB holes are typically vertical. Hole length of each drill hole is the distance from the surface to the end of hole, as measured along the drill trace. Tabulated data is not included in this report or considered material, as the only representation of the data is a map at 1:350,000 scale.
Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	 The report includes no new drilling results. Historic results The only representation of drill results (Figure 2) includes individual grades, therefore: No composites or weighted averages are applied. No top cuts have been applied. A nominal 0.5g/t Au or greater lower cut-o is reported as being potentially significant i the context of this report No metal equivalent reporting is used or applied.
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known'). 	• Historic results are presented at 1:350k scale, the assays are plotted (Figure 2) as individual sample result. As such, the orientation and true thickness are not material to the Figure or its interpretation.
Diagrams	• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These	• No new results are reported.



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	drill hole collar locations and appropriate sectional views.	• Plan is at 1:350k scale. A supporting section at this scale is not regarded to be material or informative.
Balanced reporting	• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	• All available drillholes and assays have been used to generate the only Figure using assay data. The figure is based on highest values rather than total intercepts to simplify the document and minimise the chances of introducing bias from non- representative composite intercepts.
Other substantive exploration data	• Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	• All scale-relevant exploration data is shown in diagrams and discussed in text.
Further work	 The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	 NSM plans to build on the surface geochemical data, further assess the historic drilling for open or high-priority data in the context of the Company's exploration model, and review targets in the context of new geophysical data and historic work Drill testing of interest areas will be assessed with air drilling for coverage, then RC/DD as appropriate to test depth continuation of near-surface anomalism.